2024 SWIRM 4 Cases

1. Hands On Mentor
2. Tweaking the Data
3. Big Strong Guy
4. Awkward Mentor
5. Keeping the Data
Learning Objective:
Employ various strategies to build their mentees confidence, establish trust, and foster Independence.

Case Study  The Hands-on Mentor

A professor is very enthusiastic about the research his team is conducting, and he loves to participate in everyone’s work in a deep and detailed manner. In addition to weekly team meetings plus an additional meeting with each individual in the group, he often stops by to chat and help write analysis code. When a paper is getting close, he says, "Hey, we’re almost there! This is really great stuff. How about we meet in the department this weekend and do a hard burn to get it submitted on Monday?" The professor gives every grad student and postdoc in the group a "company" pager and cell phone so he can get in touch with them quickly when he gets exciting new ideas for things to try late at night.

Some of the graduate students and postdocs love this environment: the professor is enthusiastic, happy, and generous with praise; and the frenetic environment gives them a strong feeling of living on the frontier of science. However, other junior members of the team feel smothered, watched, henpecked, and they worry that the professor will be disappointed when they report their two day progress as nothing more than reading papers and still trying to figure out how to analyze the data. They wonder if things would be better in another research group.

Guiding Questions:
1. If you were the mentee working in this environment, how would you feel?
2. Do you think it is appropriate to have a mentor be able to get in contact with mentees at all times (Like the professor with his company pagers and cell phones)?
3. What are the advantages and disadvantages of becoming "friends" with your mentee?

From Multidisciplinary Research Mentor Training Seminar (2010).

For additional information, resources and detailed facilitator notes—visit: CIMERProject.org
Learning Objective:
Mentors will learn to clarify their roles as teachers and role models in educating mentees about ethics.

Case Study  Tweaking the Data

John is mentoring an undergraduate in his lab, and has assigned her to collect data for one of the experiments in his dissertation. When the dataset is complete, he sits down to analyze it and finds his predictions completely disconfirmed. Dismayed, he calls her into his office and asks her to describe, in great detail, what she did when collecting the data. He wants to make sure that these anomalous results can't be more easily explained by mistakes in the lab. Their conversation lasts quite a while, but at the end he is still frustrated and puzzled by the data, and he sends her home so he can think about it some more.

Later, John is eating lunch in the cafeteria when he overhears his mentee talking to a friend of hers. "I think John is mad at me," she tells her friend, visibly upset, and describes their recent meeting. John is surprised to realize that his mentee took his questioning very personally. When John's mentee finishes venting, her friend replies, "If he's so mad, you probably did make a mistake somewhere. After all, he's the expert. Maybe you should tweak the data a little next time to keep him happy."

Guiding Questions for Discussion:
1. Who are the stakeholders in this case (individuals, institutions, public)?
2. What are the facts? What assumptions are you making about the situation?
3. What courses of action are possible? Which ones are preferable and why?
4. What, if anything, could have been done to prevent the situation?
Learning objective:
Recognize the impact of conscious and unconscious assumptions, preconceptions, biases and prejudices on the mentor-mentee relationship and acquire skills to manage them. Clarify their roles as teachers and role models in educating mentees about ethics

Case Study  A Big Strong Guy

You are the graduate student mentor to a team of students working in the field on a research project that occasionally requires some serious manual labor. The PI for the project visits the research site often. When he is there and needs some physical work done, he always asks for "a big strong guy" to volunteer to help him. A female student on your team volunteers after one of these requests, and your PI says, "Are you a big strong guy? No!" He then turns away, still looking for someone to assist him. What do you do?

Guiding Questions:
1. What are the main themes raised in this case study?
2. What might the mentor’s intent have been in making the statement, and what might have been the impact on the mentee?
3. How might you approach your PI with this issue?

From Field Work Research Mentor Training Seminar (2010).
For additional information, resources and detailed facilitator notes—visit: CIMERProject.org
CASE STUDY: AWKWARD MENTOR

Learning Objectives

Trainees will:
- Discuss challenges that may arise in mentoring relationships.
- Develop strategies to address mentoring relationship challenges.

Sheneka has overcome many challenges to successfully transfer from a local community college to a research university, where she is earning a B.S. degree in biochemistry. She has developed a strong support network and learned a lot about how to be successful as a student and in life. A transfer advisor at the research university, who is part of her network, helped her to prepare a successful application to a prestigious, federally funded research training program. Through this program, she is preparing for admission to graduate school.

As a trainee in the program, Sheneka was matched with a research mentor, who provides very useful help when she needs it, but otherwise leaves her alone to work on her research project. In addition, each student in the program is matched with a career mentor. Sheneka’s career mentor is nice, but offers advice and mentorship in areas where she feels that she doesn’t really need it. She already has a strong network of mentors who understand where she is coming from and how to support her.

The meetings with her career mentor have begun to feel awkward. The mentor constantly talks about her own experience, which has been very different from Sheneka’s experience. Everyone in her career mentor’s family has a college degree and her greatest challenge growing up was waiting to hear which top-tier colleges she was admitted to. Sheneka’s mentor doesn’t seem to understand the kinds of challenges that Sheneka has overcome and will continue to face. Sheneka doesn’t want to risk offending her career mentor by pointing this out, but has come to dread the monthly meetings that are required by the program. They feel like a waste of time. What can she do?

Discussion Questions

1. How would you describe the communication between Sheneka and her career mentor?

2. To whom might Sheneka share her frustration and ask for advice about what to do?

3. How might Sheneka structure the meetings with her career mentor to better meet her needs?
CASE STUDY: KEEPING THE DATA

Learning Objectives
Trainees will be able to:
► Explain why it is important to accurately document research.
► Identify key elements in research documentation.
► Understand the ethical implications of documenting research.

May, who has been doing research with Professor Gonzalez for two years, is preparing to present her research results at the campus-wide Research Symposium. Because some of her findings are quite novel and contradict reports of similar experiments in the literature, Professor Gonzalez asks to review the raw data before signing off on her presentation. When he reviews May’s notebook, however, there are no hard-copy records of the data. Instead he finds the data on May’s computer.

1. Did May do anything wrong? Why or why not?

2. Is it important to keep hard-copy records of data? Why or why not?
